

REMARKS

A petition for a two month extension of time has today been filed as a separate paper and a copy is attached hereto.

The Rejection of Claims 18, 21 and 22 for Obviousness over Umeda in View of the Two Wang U.S. Patents

Claims 18, 21 and 22 as Previously Examined

Firstly, it is believed that the rejection, insofar as paragraph 3 applies the rejection to claim 21, represents an inadvertent error in view of paragraph 6 of the office action which indicates that claim 21 is allowable over the prior art.

In paragraph 3 of the office action the examiner writes:

Umeda teaches every aspect of the invention except the casing being formed from a plurality of metal plates in face-to-face contact along the axial direction.

It is respectfully submitted that the above-quoted statement is erroneous. It is true that at column 6, lines 35-39 Umeda et al teach that Fig. 7 illustrates an embodiment wherein "air flow is generated in the axial direction of the fan motor 402..." [Emphasis added.] However, at column 6, lines 28-30 Umeda et al clearly teach that in the embodiment of Fig. 7 the air flow is through openings 428. Looking at Fig. 7 it is seen that openings 428 are offset from the central or rotational axis of the fan and, thus, while openings 428 would define an air flow passage in the same direction as the axis of the fan, that air flow path would be offset from, rather than coaxial with, the rotor. Note in claim 18 where the casing is defined, in part, as "defining an axial flow passage coaxial

with said rotor for flow of cooling air between said rotor and said casing.”

Secondly, it is respectfully submitted that the references are not *prima facie* combinable in the manner adopted by the examiner. On the one hand, the examiner relies on his primary reference Umeda et al for teaching an axial air flow passage and on the other hand maintains that it would have been obvious to substitute, for the casing of Umeda, the casing of Wang '746 which does not have an axial air flow passage as defined by claim 18. Wang '746 teaches, for example, in the Abstract:

Cool ambient air is drawn into the assembly unit by the fan via the vents [see 70 in Fig. 4 and the teaching at column 3, lines 48-50], which then passes up the central passage, ...

Thus, in Wang '746 the flow path does not extend axially “from said inlet [defined as located “at one axial end” of the casing] to said outlet [defined as “at an axial end opposite said inlet”]. Therefore, even if Umeda et al disclosed an axial flow passage coaxial with said rotor, as defined by claim 18, the allegedly obvious modification in accordance with Wang, i.e., substitution of the casing of Wang for that of Umeda et al, would serve to eliminate the feature of Umeda et al on which the examiner relies in the first instance.

The Rejection as it Might Be Applicable to Claims 18 and 22 as Amended

The examiner's remarks in paragraph 3 reveal that he is treating the spacers 20 and the plates 30 of Wang '476 all as “plates” in face-to-face contact. However, as noted above, that casing does not provide “an air inlet at one axial end [extending] to an outlet at an axial end opposite said inlet.” Further, the claims as amended here serve to further distinguish the structure of the casing of Wang '746 in that the plural metal plates are now defined as “having opposing continuous planar surfaces oriented

perpendicular to said central axis and having a central opening surrounding said axial flow path” with those same continuous planar surfaces “in face-to-face contact along the axial direction of said rotary shaft.”

The Rejection of Claims 19 and 20 for Obviousness

Claims 19 and 20 are rejected for obviousness over the same reference combination applied to claims 18 and 22 with additional reliance upon Thomas - U.S. 5,288,203 as a secondary reference.

The rejection is traversed for the reason that these claims depend from claim 18 which defines subject matter patentably distinct from the reference combination for the reasons noted above. The additional citation of Thomas is not relevant to those distinctions, Thomas being cited solely for its alleged disclosure of the “exhaust plate.”

The rejection is further traversed for the reason that the fan casing of Thomas ‘203 is not formed of a plurality of plates and, therefore, the concept of a “first metal plate” is meaningless in the context of Thomas.

The Rejection of Claim 23 for Obviousness

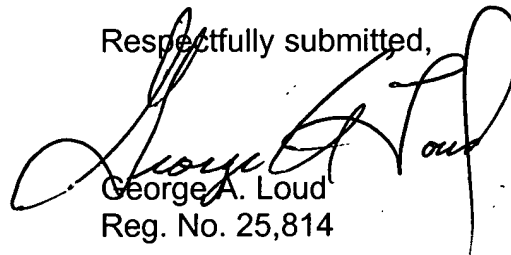
Claim 23 is rejected over the same reference combination applied to claims 18 and 22 with additional citation of Wu - U.S. 5,335,722 as an additional secondary reference. Claim 23 depends from claim 18 which is patentably distinct from the reference combination applied to claim 18 for the reasons noted above and the disclosure of Wu is not cited as having any relevance to those distinctions.

Finally, the undersigned has now briefly reviewed the 12 documents submitted with applicants’ Information Disclosure Statement of April 29, 2005 (corrected by the

paper submitted May 13, 2005) and notes that Japanese Kokai 11-075340 appears to be a partial equivalent of the examiner's Umeda et al reference in that it discloses several of the embodiments disclosed in the corresponding Umeda et al U.S. patent relied upon by the examiner. The only other document among the 12 noted by the undersigned as having any relevance here is Japanese Kokai 2000-341902 which appears to be of a relevance redundant with the disclose of the Wang patents of record.

In conclusion, it is respectfully requested that the examiner reconsider the rejections of record with a view toward allowance of the claims as amended.

Respectfully submitted,



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Dated: June 21, 2005

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